

In the Claims

Claim 1 (Original): A vector comprising a plurality of expression cassettes, wherein said plurality of expression cassettes comprise:

(a) at least one gene promoting cassette comprising a first polynucleotide operably linked to a first promoter sequence; and

(b) at least one gene suppressing cassette comprising a second polynucleotide operably-linked to a second promoter sequence, wherein said second polynucleotide encodes a short interfering RNA (siRNA) molecule that reduces expression of a target gene by RNA interference.

Claims 2-6 (Cancelled)

Claim 7 (Currently amended): The vector of ~~any of claims 1 to 6~~ claim 1, wherein the vector comprises a plurality of said gene promoting cassettes.

Claim 8 (Currently amended): The vector of ~~any of claims 1 to 7~~ claim 1, wherein said vector comprises a plurality of said gene suppressing cassettes.

Claim 9 (Cancelled)

Claim 10 (Currently amended): The vector of ~~any of claims 1 to 9~~ claim 1, wherein said first promoter sequence, or said second promoter sequence, or both said first and second promoter sequences are inducible.

Claim 11 (Currently amended): The vector of ~~any of claims 1 to 10~~ claim 1, wherein said first promoter sequence, or said second promoter sequence, or both said first and second promoter sequences are tissue-specific.

Claims 12-15 (Cancelled)

Claim 16 (Currently amended): The vector of ~~any of claims 1 to 15~~ claim 1, wherein said first polynucleotide sequence encodes a polypeptide.

Claim 17 (Original): The vector of claim 16, wherein said polypeptide comprises a protein selected from the group consisting of an enzyme, cytokine, growth factor, hormone, receptor, and receptor ligand.

Claims 18-21 (Cancelled)

Claim 22 (Currently amended): The vector of ~~claim 21~~ claim 1, wherein the target gene is a Dengue virus gene ~~encodes~~ encoding a structural protein.

Claim 23 (Currently amended): The vector of ~~claim 21~~ claim 1, wherein the target gene is a Dengue virus gene ~~encodes~~ encoding a non-structural protein.

Claim 24 (Original): The vector of claim 1, wherein said second polynucleotide comprises at least one nucleic acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

Claim 25 (Original): A vector comprising at least one gene suppressing cassette, wherein said gene suppressing cassette comprises a polynucleotide operably-linked to a promoter sequence, wherein said polynucleotide encodes a short interfering RNA (siRNA) molecule that reduces expression of a target Dengue virus gene by RNA interference.

Claim 26 (Currently amended): The vector of ~~claim 24~~ claim 25, wherein said vector comprises a plurality of gene suppressing cassettes.

Claim 27 (Currently amended): The vector of ~~claims 25 or 26~~ claim 25, wherein said target gene encodes a structural protein.

Claim 28 (Currently amended): The vector of ~~claims 25 or 26~~ claim 25, wherein said target gene encodes a non-structural protein.

Claim 29 (Currently amended): The vector of ~~claims 25 or 26~~ claim 25, wherein said target gene is at least one gene encoding a protein selected from the group consisting of C, prM, E, NS1, NS2a, NS3, NS4a, NS4b, and NS5.

Claim 30 (Currently amended): The vector of ~~claims 25 or 26~~ claim 25, wherein said polynucleotide comprises the nucleotide sequence of SEQ ID NO:3 or SEQ ID NO:4.

Claims 31-33 (Cancelled)

Claim 34 (Currently amended): A method of modulating the expression of multiple genes within a host, said method comprising administering the vector of ~~any of claims 1 to 24~~ claim 1 to the host, wherein the first polynucleotide sequence is expressed in the host, wherein the second polynucleotide is transcribed to produce the siRNA molecule, and wherein the siRNA molecule is capable of reducing expression of a target gene within the host by RNA interference.

Claim 35 (Cancelled)

Claim 36 (Currently amended): The method of ~~claims 34 or 35~~ claim 34, wherein the target gene is an endogenous gene of the host.

Claim 37 (Currently amended): The method of ~~claims 34 or 35~~ claim 34, wherein the target gene is ~~an exogenous gene~~ exogenous to the host.

Claims 38-41 (Cancelled)

Claim 42 (Currently amended): A method for inhibiting the expression of Dengue virus genes within a host, said method comprising administering the vector of ~~any of claims 25 to 33~~ claim 25 to the host, wherein the polynucleotide sequence is transcribed to produce the siRNA molecule, and wherein the siRNA molecule is capable of reducing expression of a target Dengue virus gene within the host by RNA interference.

Claims 43-44 (Cancelled)

Claim 45 (Currently amended): The method of ~~claims 43 or 44~~ claim 42, wherein the host is suffering from a Dengue virus infection.

Claim 46 (Currently amended): The method of ~~claims 43 or 44~~ claim 42, wherein the host is not suffering from a Dengue virus infection, and wherein the vector is administered prophylactically.

Claim 47 (Cancelled)

Claim 48 (Currently amended): A method for producing a vector for modulating the expression of multiple genes, said method comprising combining at least one gene promoting cassette with at least one gene suppressing cassette to form the vector of ~~any of claims 1 to 24~~ claim 1.

Claim 49 (Currently amended): A method for producing a vector for inhibiting the expression of Dengue virus genes within a host, said method comprising combining at least one polynucleotide with an operably linked promoter sequence to form the vector of ~~any of claims 25 to 33~~ claim 25.

Claim 50 (New): A pharmaceutical composition comprising:

- (a) a vector and a pharmaceutically acceptable carrier, said vector comprising:
  - at least one gene promoting cassette comprising a first polynucleotide operably linked to a first promoter sequence; and
  - at least one gene suppressing cassette comprising a second polynucleotide operably linked to a second promoter sequence, wherein said second polynucleotide encodes a short interfering RNA (siRNA) molecule that reduces expression of a target gene by RNA interference; or
- (b) a vector and a pharmaceutically acceptable carrier, said vector comprising:
  - at least one gene suppressing cassette, wherein said gene suppressing cassette comprises a polynucleotide operably linked to a promoter sequence, wherein said polynucleotide encodes a

short interfering RNA (siRNA) molecule that reduces expression of a target Dengue virus gene by RNA interference.